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| APPLICATION NO  | FILING DATE     | FIRST NAMED INVENTOR | ATTÖRNEY DÖCKET NO.     | CONFIRMATION NO |
|---|-----------------|----------------------|-------------------------|-----------------|
| 09/783,242  | 02/14/2001      | James C. Danly, SR.  | 3654.006                | 1570            |
| 7   | 7590 02/20/2003 |                      |                         |                 |
| Stephan A. Pendorf<br>Pendorf & Cutliff<br>P.O. Box 20445 |                 |                      | EXAMINER                |                 |
|   |                 |                      | JOHNSON, JERRY D        |                 |
| Tampa, FL 33622-0445                                      |                 |                      | ART UNIT                | PAPER NUMBER    |
|   |                 |                      | 1764                    | —————<br>Ч      |
|   |                 |                      | DATE MAILED: 02/20/2003 | ,               |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)  |  |
|---|---|---|--|
|   | 09/783,242  | DANLY, ET AL.   |  |
| Office Action Summary   | Examiner  | Art Unit  |  |
|   | Jerry D. Johnson  | 1764  |  |
| The MAILING DATE of this communication eriod for Reply  | appears on the cover sheet w  | ith the correspondence address  |  |
| A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO  - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days, a  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by str.  - Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).  **Tatus**  | N. R 1.136(a). In no event, however, may a control of the statutory minimum of this rich will apply and will expire SIX (6) MON atute, cause the application to become Af | reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |  |
| 1) Responsive to communication(s) filed on  | ·   |   |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑   | This action is non-final.   |   |  |
| 3) Since this application is in condition for all closed in accordance with the practice und isposition of Claims   |   |   |  |
| 4) Claim(s) 1-12 is/are pending in the applica  | tion  |   |  |
| 4a) Of the above claim(s) is/are without state with the above claim(s) |   |   |  |
| 5) Claim(s) is/are allowed.   | arawir irom oonolacration.  |   |  |
| 6). Claim(s) <u>1-12</u> is/are rejected.   |   |   |  |
| 7) Claim(s) is/are objected to.   |   |   |  |
| 8) Claim(s) are subject to restriction an   | d/or election requirement.  |   |  |
| pplication Papers   | <b>,</b>  |   |  |
| 9) The specification is objected to by the Exam   | niner.  |   |  |
| 10) The drawing(s) filed on is/are: a) a  | ccepted or b) objected to by t  | he Examiner.  |  |
| Applicant may not request that any objection to   | o the drawing(s) be held in abey  | ance. See 37 CFR 1.85(a).   |  |
| 11) The proposed drawing correction filed on  | is: a)  approved b) c   | disapproved by the Examiner.  |  |
| If approved, corrected drawings are required in   | reply to this Office action.  |   |  |
| 12) The oath or declaration is objected to by the   | Examiner.   |   |  |
| riority under 35 U.S.C. §§ 119 and 120  |   |   |  |
| 13) Acknowledgment is made of a claim for fore  | eign priority under 35 U.S.C.   | § 119(a)-(d) or (f).  |  |
| a) All b) Some * c) None of:  |   |   |  |
| 1. Certified copies of the priority docum   | ents have been received.  |   |  |
| 2. Certified copies of the priority docum   | ents have been received in A  | application No  |  |
| <ul> <li>3. Copies of the certified copies of the papplication from the International</li> <li>* See the attached detailed Office action for a</li> </ul>   | Bureau (PCT Rule 17.2(a)).  |   |  |
| 14) Acknowledgment is made of a claim for dome  | estic priority under 35 U.S.C.  | § 119(e) (to a provisional application).  |  |
| a) The translation of the foreign language 15) Acknowledgment is made of a claim for dom  | •   |   |  |
| tachment(s)   |   |   |  |
| Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449) Paper Not  | 5) Notice of  | Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)   |  |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danly, Sr. in view of Ecer, Sato et al. and Takahashi et al.

Danly, Sr., U.S. Patent 5,094,548, teaches a composite bushing which employs a monolithic steel body and a compacted and sintered porous bearing layer (column 2, lines 58-62). The porous bearing layer is a compacted and sintered material, such as bronze, lead alloy, tin, tin alloy or other material well known to those of ordinary skill in the art (column 4, lines 57-63). Danly, Sr. differs from the instant claims in not teaching the addition of a "hardfacing" material to the bearing layer.

Ecer, U.S. Patent 4,474,861; Sato et al., U.S. Patent 5,466,276 and Takahashi et al., U.S. Patent 6,082,317, are relied on as teaching the addition of materials of high hardness to a metal matrix in order to improve the wear resistance of said metal. See, for example, Sato et al. column 6, lines 34+.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a "hardfacing" material to the bearing layer of Danly, Sr. in order to improve the wear resistance of said bearing layer.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1-7 and 10-12, the term "hardfacing composition" is indefinite.

In claims 1, 2 and 4-12, the term "percolation limit" is indefinite.

Claim 7 is indefinite, i.e., what is intended by the recitation "= 50 wt.% cobalt and = 25 wt.% molybdenum" is unclear.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (703) 308-2515. The examiner can normally be reached on 6:00-3:30, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Caldarola can be reached on (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-5408 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-9661.

Jerry D. Johnson Primary Examiner Art Unit 1764

JDJ

February 13, 2003